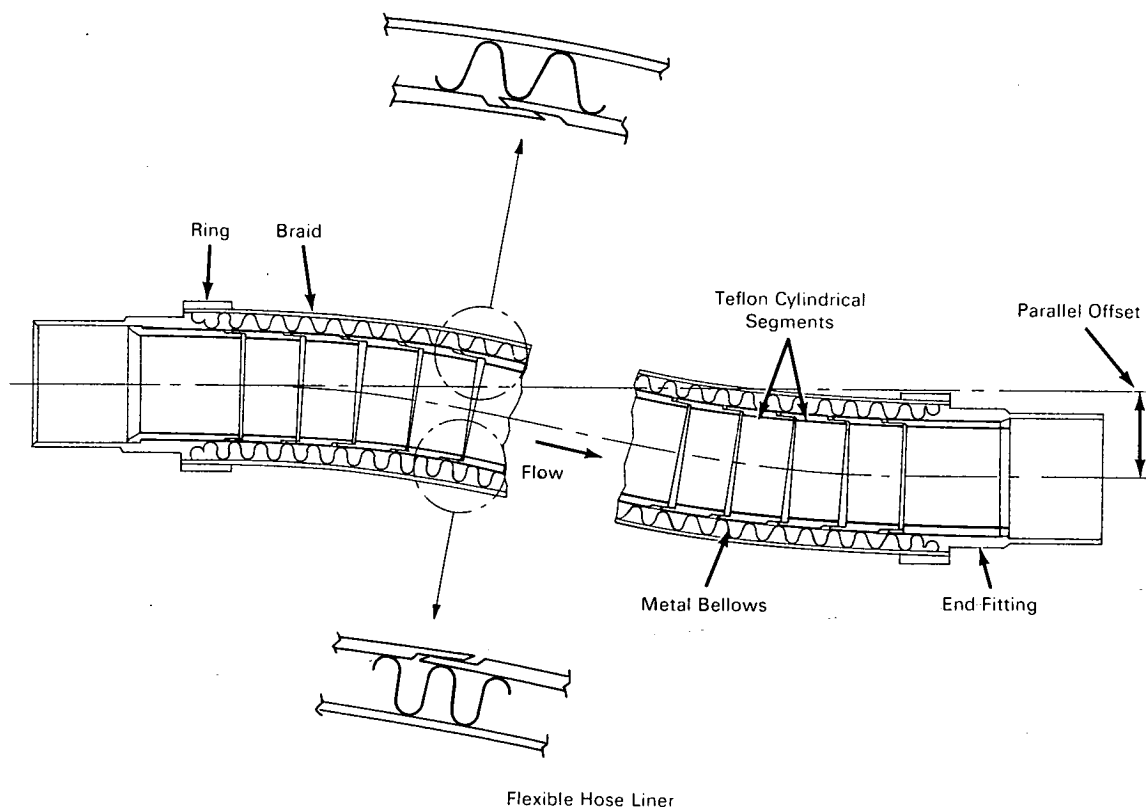


# NASA TECH BRIEF



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## TFE-Fluorcarbon Liners for Flexible Hoses



### The problem:

Design of a flexible hose, for handling high rates of flow under high pressures, that permits greater parallel offset than 0.10. Under greater offset, available hoses, commonly lined with metallic one-piece or two-piece liners, allow the flow to impinge on the surrounding metallic bellows, with consequent failure of the hose.

### The solution:

A superior flexible liner is made from short lengths of TFE-fluorocarbon tubing. The outside diameter of one end of each length is reduced so that it becomes a male end; increase in the internal diameter of the other end makes it female. Thus the joints between the lengths are sliding overlaps that permit flexibility with much greater parallel offset.

(continued overleaf)

The liners are surrounded by the usual metallic bellows covered with braid. Oil companies and manufacturers of hoses may be interested.

**Note:**

No further documentation is available. Inquiries may be directed to:

Technology Utilization Officer  
Marshall Space Flight Center  
Huntsville, Alabama 35812  
Reference: B69-10288

**Patent status:**

No patent action is contemplated by NASA.

Source: D. F. Higley of  
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